communication systems with respect to a desired mode of

communication between a first end user and a second end user. A

number of operational states that are required of the

communication systems to implement the desired mode of operation

between the two end users is determined, wherein each state

pertains to a first operation of a first gateway system

associated with the first end user and a corresponding second

operation of a second gateway system associated with the second

end user. The interconnected communication systems are tested by

causing the systems to perform specified transitions between

pairs of at least some of the operational states. --

In the Claims

Delete claims 1 and 2 without prejudice, and substitute

claims 3-10, as follows.

-- 3. A method of generating a set of test sequences

for evaluating interoperability of a number of interconnected

communication systems with respect to a desired mode of

communication between a first end user and a second end user, the

5   method comprising:

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determining a number of operational states that are required of the communication systems to implement the desired mode of operation between the first and the second end users, wherein each operational state pertains to a first operation of a first gateway system associated with the first end user and a corresponding second operation of a second gateway system associated with the second end user; and

testing the interconnected communication systems by causing the systems to perform specified transitions between pairs of at least some of the operational states.

4. The method of claim 3, including providing at least one of the communication systems in the form of an Internet protocol network.

5. The method of claim 3, including providing at least one of the communication systems in the form of a switched telephone network.

6. The method of claim 3, including selecting the desired mode of communication as voice communication.

7. The method of claim 3, wherein said determining step includes defining a finite state machine having vertices

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